STATE OF TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243



OPERATING PERMIT Issued Pursuant to Tennessee Air Quality Act

Date Issued: December 23, 2013 Permit Number:

Date Amended: May 22, 2015 [Amendment #1] 068033P

Date Expires: July 1, 2023

Issued To: Installation Address:
New Cingular Wireless PCS, LLC 161 County Road 216

DBA: AT&T Mobility Niota

Installation Description: Emission Source Reference No.

One (1) Internal Combustion 54-0245-01

Diesel Fuel-Fired Engine (93 hp)
NSPS (Subpart IIII)
for an Emergency Backup Generator
GACT (Subpart ZZZZ)

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated October 16, 2013, and is signed by Michele M. Blazek, Assistant Secretary for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

TAPCR 1200-03-09-.02(3)

(conditions continued on next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

- 2. The stated design heat input capacity for this internal combustion engine (Iveco engine rated 70 KW serving GENERAC Generator (SD-050)) is **0.57 MMBtu per hour**. Any increase in this capacity will require a construction permit. TAPCR 1200-03-09-.02(3)
- 3. This source is subject to the requirements of 40 CFR Part 60 Subpart IIII, the requirements of 40 CFR 89.112, and the provisions of TAPCR 1200-03-09-.03(8).
- 4. The Permittee must operate the emergency stationary ICE according to the requirements in **Conditions 5, 6, & 7** in order for the engine to be considered an emergency stationary ICE under Subpart IIII. Any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for up to 50 hours per year, as described in **Conditions 5, 6, & 7** is prohibited. If the emergency stationary ICE is <u>not</u> operated according to the requirements in **Conditions 5, 6, & 7** the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines under Subpart IIII. 40 CFR §60.4211(f)
- 5. The emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response, as specified in **Condition 6**. Except as provided in **Condition 7**, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. 40 CFR §60.4211(f)(3)
- 6. Pursuant to 40 CFR §60.4211(f)(2), the emergency stationary ICE may be operated for any combination of the purposes specified in (a) through (c) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations, as specified in **Condition 5**, counts as part of the 100 hours per calendar year.
 - (a) The emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing beyond 100 hours per calendar year.
 - (b) The emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (c) The emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- 7. Pursuant to 40 CFR §60.4211(f)(3)(i), the 50 hours per year for non-emergency situations as specified in **Condition 5** can be used to supply power as part of a financial arrangement with another entity if all of the following conditions (a) through (e) are met:
 - (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

- (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (e) The owner or operator identifies and records the entity that dispatches the engine and specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
- 8. Operating time for this emergency generator shall not exceed maximum of 500 hours per calendar year pursuant to TAPCR 1200-03-09-.03(8) and the agreement letter dated June 26, 2013 from the Permittee.
 - Compliance with this limitation shall be assured by compliance with the records required by Condition 9.
- 9. The Permittee shall keep a log of the number of operating hours for each calendar year, in a form that readily provides the information required in the following table and shows compliance with **Conditions 5, 6, & 8**. All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required. The Permittee shall retain this record for a period of not less than two (2) years and keep this record readily available for inspection by the Technical Secretary or their representative. TAPCR 1200-03-10-.02(2)(a).

YEARLY Log for Source 54-0245-01 Operation# Dates Classification of Start time End time Operation Yearly total for Yearly total for operation time non-emergency time emergency time (End - Start) #2 #3 Example: 11:15 AM 0.50 hours 4/20/2013 Maintenance 10:45 AM 16.25 hours 50.25 hours Example: 5/15/2013 1:45 PM 3:00 PM 17.50 hours Readiness Testing 1.25 hours 50.25 hours 5/17/2013 Example: Power Failure caused 5/18/2013 2:45 PM 4:00 AM 13.25 hours 17.50 hours 63.50 hours by lightning

- 10. The permittee must use diesel fuel that meets the requirements of 40 CFR §60.4207(b). Except as otherwise specifically provided, the diesel fuel is subject to the following per-gallon standards:
 - (1) Sulfur content of 15 ppm maximum.
 - (2) Cetane index or aromatic content, as follows:
 - (i) A minimum cetane index of 40; or
 - (ii) A maximum aromatic content of 35 volume percent.
- 11. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application. TAPCR 1200-03-09
- 12. The permit is valid only at this location. TAPCR 1200-03-09
- 13. The issuance of this permit does not exempt the Permittee from any requirements of the Environmental Protection Agency pertaining to emissions from the operation of this source. TAPCR 1200-03-09
- 14. The engine for the following emergency power generator is subject to the requirements of 40 CFR Part 60 (NSPS), Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The permittee shall be subject to the following limitations:

| Generator | GEN 1 (50 KW) | | | |
|---------------|-------------------------------|--|--|--|
| Model # | ` ' | | | |
| Wiodei # | GENERAC (SD-050) | | | |
| Model Year | 2011 | | | |
| Heat-Input | 0.57 | | | |
| (MMBtu/hr) | 0.57 | | | |
| Power-Out | 93 | | | |
| (Horsepower) | 93 | | | |
| Applicable | | | | |
| Emission | §60.4205(b) & §89.112 Tier #3 | | | |
| Standards | | | | |
| Units of | grams/Kw-hr | | | |
| Measure | grams/Kw-m | | | |
| PM | 0.40 | | | |
| SO_2 | | | | |
| CO | 5.0 | | | |
| NO_X | | | | |
| VOC | | | | |
| $NMHC + NO_X$ | 4.7 | | | |
| | | | | |
| Emissions | Tons/year | | | |
| Limits | | | | |
| PM | 0.02 | | | |
| SO_2 | 0.05 | | | |
| CO | 0.19 | | | |
| NO_X | 0.18 | | | |
| VOC | | | | |

15. Particulate matter (TSP) emitted from this source shall not exceed 0.40 grams/Kw-hr (**0.06 lb/hr and 0.02 tons/yr**). This emission limitation is established pursuant to the Emission Standards in 40 CFR §89.112, Table 1.

Compliance with **PM** limitation shall be assured with **Conditions 2, 10,** the records required by **Condition 9** and the manufacturer's certification of compliance pursuant to 40 CFR §60.4205. Any increase in this limit will require a construction permit.

16. Carbon Monoxide (CO) emitted from this source shall not exceed 5.0 grams/Kw-hr (**0.77 lb/hr and 0.19 tons/year**). This emission limitation is established pursuant to the Emission Standards in 40 CFR §89.112, Table 1 and TAPCR 1200-03-07-.07(2).

Compliance with **CO** limitation shall be assured with **Conditions 2, 10,** the records required by **Condition 9** and the manufacturer's certification of compliance pursuant to 40 CFR §60.4205. Any increase in this limit will require a construction permit.

17. Nitrogen Oxides (NO_X) emitted from this source shall not exceed 4.7 grams/Kw-hr (**0.73 lb/hr and 0.18 tons/yr).** This emission limitation is established pursuant to the Emission Standards in 40 CFR §89.112, Table 1 and TAPCR 1200-03-07-.07(2).

Compliance with NO_X limitation shall be assured with Conditions 2, 10, the records required by Condition 9 and the manufacturer's certification of compliance pursuant to 40 CFR §60.4205. Any increase in this limit will require a construction permit.

18. Sulfur dioxide (SO₂) emitted from this source shall not exceed **0.19 lb/hr nor 0.05 tons/year**. TAPCR 1200-03-14-.03(5).

Compliance with SO_2 limitation shall be assured with Conditions 2, 10 and the records required by Condition 9. Any increase in this limit will require a construction permit.

19. The owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, must install a non-resettable hour meter prior to startup of the engine. The meter is required per **monitoring requirements** of NSPS §60.4209(a).

Since this facility has purchased an engine that is certified to meet the non-road Tier 3 limits, it meets the non emergency engine standards. Although an hour meter is not required as per NSPS Subpart IIII, the permittee will utilize a non-resettable hour meter to determine hours of operation and will denote same in the log contained in **Condition 9.**

- 20. Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)
- 21. The permittee shall operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer. 40 CFR §60.4211(a).
- 22. Under the Provisions of 40 CFR 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), this facility is considered to be a "new" stationary RICE located at an "Area Source." This unit is considered to be new because its construction commenced on or after June 12, 2006. (according to Subpart ZZZZ §63.6590).
 - 40 CFR §63.6590(c) states that a new or reconstructed stationary RICE located at an area source must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines. No further requirements apply for such engines under Subpart ZZZZ.
- 23. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards. TAPCR 1200-03-09-.03(8)
- 24. The issuance of this permit supersedes any permit(s) previously issued for this air contaminant source. TAPCR 1200-03-09
- 25. The permittee shall apply for renewal of this permit not less than sixty (60) days prior to the permit expiration date, pursuant to Rule 1200-03-09-.02(3) of the Tennessee Air Pollution Control Regulations.

(end of conditions)

The permit application gives the location of this source as 35°32'09.18" Latitude and -84°39'11.62" Longitude.

Amendment #1 – This amendment is issued because of the permittee's request dated April 7, 2015, to make the following changes to conditions 2, 5, 7, and 9 of operating permit 068033P.

Condition 2: remove Model #55640, just keep SD050;

Condition 5: remove language from §60.4211(f)(3)(i)(E) as already in condition 7;

Condition 7: update to include (e) in "following conditions (a) through (d);

Condition 9: remove "at this source" since unmanned cell tower

Also, the Division added the permittee's location for this source at the end of this permit and added rule citations to conditions 1, 2, and 24.